

## Converting an Urgent Case into an Elective Procedure: Volvulus of Sigmoid Colon

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Dear Editor,

A 73-year-old male patient was admitted to the emergency room with abdominal distention and obstipation which had lasted for two days. On performing a physical examination, significant asymmetric abdominal distention was detected. There were no signs of peritonitis, and his digital rectal examination revealed an empty rectum. In his abdominal X-ray, a dilated colonic segment was observed, with a coffee bean sign (Figure 1). Sigmoid colon and mesentery torsion were detected on performing contrast-enhanced computed tomography (CT) (Figure 2). The patient underwent urgent colonoscopy. The sigmoid colon was decompressed after detorsion (Figure 3). On the 7<sup>th</sup> day after urgent admission, the patient underwent elective sigmoid colon resection and side-by-side anastomosis. The patient was discharged on the postoperative day 6. A pathologic examination revealed a benign disease. The patient had completed a 4-month follow-up period. Written informed consent was obtained from the patient who participated in this study.

Sigmoid volvulus (SV) may cause ischemia, perforation, sepsis, and finally, mortality (1). SV is the third most common cause of colonic obstruction in adults (2). Middle-aged patients are more frequently affected in countries with a high incidence of SV, whereas the incidence increases at around 70 years of age in developed countries (3, 4). The main predisposing factors are a long sigmoid colon and prolonged mesocolon (3). In addition to advanced age, male sex, postoperative adhesions, pregnancy, psychiatric illness, and some medications can be cited as other risk factors (1-5).

Abdominal X-ray and CT are diagnostic imaging methods (3, 4). The first step is to attempt colonoscopic re-

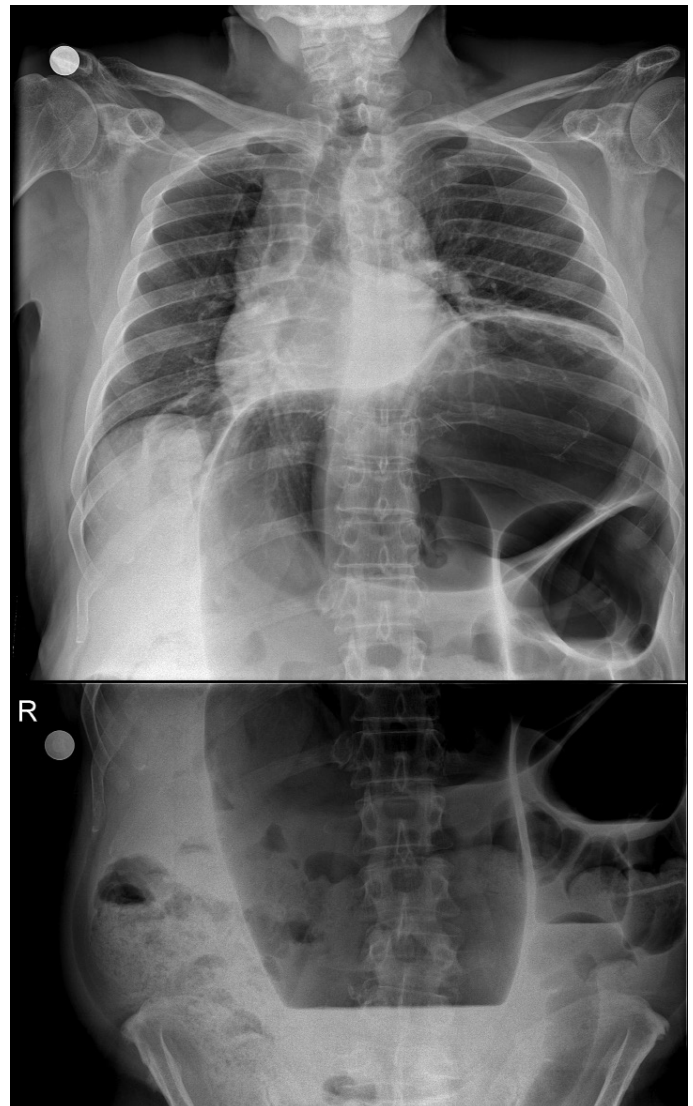


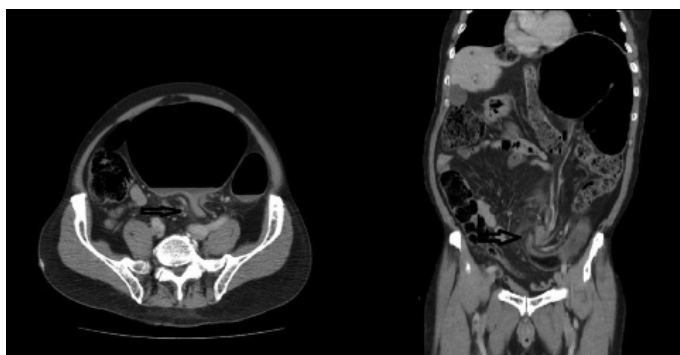
FIGURE 1. Volvulus and typical "coffee bean" sign in the X-ray

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**FIGURE 2.** Twisted mesentery of the sigmoid colon (arrow)



**FIGURE 3.** Fecal movement to the distal segment after colonoscopic detorsion

duction. Urgent surgery is required in patients with unsuccessful colonoscopic reduction or peritonitis or perforation associated with colonoscopy (1, 3-5). The mortality rate in emergency operations is high due to multiple comorbidities of affected patients (1-5). The recommended method for patients with acute SV with peritonitis is Hartman colostomy following sigmoid resection (1, 3-5). However, in cases with successful colonoscopic reduction, even if in the first volvulus episode, elective colectomy should be planned after reduction in patients with hemodynamic stability and low risk of surgical mortality and morbidity. Grossman et al. (2) reported a 6% mortality rate with an elective operation after colonoscopic decompression. They reported that the SV recur-

rence rate and mortality rate associated with recurrence were 23% and 20%, respectively, in the colonoscopic decompression group.

Colonoscopic reduction should be planned as soon as possible after a diagnosis is made. If reduction is achieved and the patient is hemodynamically stable, we believe that performing elective surgery will help eliminate the possibility of relapses of SV, reduce the mortality and morbidity rates of the urgent operation, and not required additional surgical intervention to close the colostomy that might open during an emergency operation.

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**Informed Consent:** Written informed consent was obtained from the patient who participated in this study.

**Peer-review:** Externally peer-reviewed.

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